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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,997	03/16/2001	Jiann-Jyh (James) Lay	023925-00005	5092

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EXAMINER

HUYNH, KIM NGOC

ART UNIT

PAPER NUMBER

2182

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/808,997

Applicant(s)

LAY, JIANN-JYH (JAMES)

Examiner

Kim Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1-7 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Roy et al. (WO 00/52858).

Claims 1 and 11 Roy discloses a method of flow control management of data packets (see page 1, line 6 through page 4, line 15 and page 6, line 3 through page 9, line 32, and Figs. 1-3, 6, and 8-10) in a switch with memory interface connected to a bus having transmit and receiving port (see Fig. 1). The flow control management having steps of determining each time data is written to/freed from memory RAM 36 (cell/packet enters or exits ATM switch) and calculating how much total memory is being used and comparing the total memory to a first predetermined threshold (Fig. 9, step 134-135). The determining step is performed when at least one of the pointers is moved (updating free pointer by increment or decrement the table entry each time cell is added or removed, page 4, 2nd paragraph). Roy also discloses using memory implemented as a linked list with pointers pointing to the next memory location in the link list (see Figs. 2-3).

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Claim 2-5, Roy discloses the step of determining data being written/freed from memory comprising step of receiving indication that the memory has successfully received or transmit the data packet over the bus (updated only when cell is received or read, see page 4, 2nd paragraph).

Claims 6-7, Roy discloses the steps of calculating total memory used by increment and decrement a counter each time data is being written/read to/from memory (increment/enter count, Fig. 8-9, steps 120 and 158; decrement counter, Fig. 10, step 168).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being obvious over Roy in view of Simmons et al. (US 6,84,856). Roy discloses the apparatus for implementing the flow control of claims 1 and 15 as discussed above. Roy does not explicitly disclose a comparator for performing the comparison of used memory against the threshold. Please note it is well known to one having ordinary skill in the art to realize that comparator are implement for performing comparison task. It would have been obvious to one having ordinary skill in the art to utilize a comparator in order to carry out the

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comparison step of checking for available memory (step 134 of Fig. 9). The Simmons reference is used support the fact that it is well know to use to use comparators (214-222) for the purpose of carrying out the comparison operation.

5. Claims 8-10, 12-14, 16-19, and 21-23 are rejected under 35 U.S.C. 103(a) as being obvious over Roy in view of Simmons et al. (US 6,84,856).

Claim 8-10, Roy does not predetermined threshold and issue a command indicating a first threshold has been reached which indicates that the memory is becoming full and issuing a command when a second threshold is reach. Simmons discloses (abstract and Figs. 1-5) issuing a command when the first threshold (low) has been reach to indicate that the memory is becoming full and a second command when a second threshold (high) is reach and the data being dropped (during the suspension of data transmission (PAUSE period), no data is being transmitted/received by the network, data transmitted to the switch is being dropped during that period) in order to minimize congestion and avoid lost of data (abstract and col. 1, l. 48 through col. 2, l. 22). It would have been obvious to one having ordinary skill in the art to utilize the teaching of Simmons in utilize multiple thresholds as taught by Simmons in order accommodate for the dynamic of switch network traffic and to avoid overloaded and reduce congestion (Simmons, col. 1, l. 62- col. 2, l. 40).

Claims 12-14, 16-19, and 21-23 are similar to claims 8-10 and therefore are rejected accordingly.

Response to Arguments

6. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 12/15/03 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

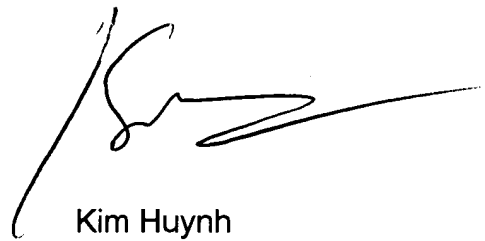
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (703) 308-1678.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'Kim Huynh', written in a cursive style.

Kim Huynh
Primary Examiner
Art Unit 2182

KH
March 22, 2004